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## **CLAIMS**

- 1. A sperm regulation method which comprises providing a sperm sample containing a extracellular matrix protein so that the sperm is in a low motility non-capacitated state, and adding angiotensin II or a related peptide to stimulate motility and capacitate the sperm.
- 2. A method according to claim 1 in which the sperm sample containing a extracellular matrix protein has been prepared by adding an extracellular matrix protein to a sperm sample to bring the sperm into a non-capacitated state.
- 3. A method according to claim in which the sperm sample containing an extracellular matrix protein is a sample which naturally contains an extracellular matrix protein.

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- 4. A method according to claim 1, 2 or 3 in which the sperm sample containing an extracellular matrix protein has been stored prior to adding angiotensin II or a related peptide to capacitate the sperm.
- 20 5. A method according to claim 4 in which the sperm sample containing an extracellular matrix protein has been frozen or chilled for storage and is thawed prior to adding angiotensin II or a related peptide to capacitate the sperm.
  - 6. A method according to claim 4 in which the extracellular matrix protein is added to a sperm sample before being been frozen or chilled for storage and is thawed prior to adding angiotensin II or a related peptide to capacitate the sperm.
    - 7. A method according to any one of claims 1 to 6 which is carried out in vitro.
- 30 8. A method according to any one of claims 1 to 6 which is carried out at least partly in vivo.

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- 9. A method according to any one of claims 1 to 8 in which the extracellular matrix protein is selected from fibronectin, vitronectin and laminin.
- 10. A method according to any one of claims 1 to 9 in which the capacitating agent is angiotensin II or angiotensin II amide or a peptide containing the tripeptide RGD.

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- 11. Use of one or more extracellular matrix proteins as an agent to conserve sperm in a low motility non-capacitated state.
- 12. Use according to claim 11 in which the extracellular matrix protein-containing sperm is stored in liquid form.
- 13. Use according to claim 11 in which the extracellular matrix protein-containing sperm is stored in frozen form.
  - 14. Use of angiotensin II or related peptides as an agent for stimulating motility and capacitation of sperm samples that have been conserved in a low motility non-capacitated state by the presence of an extracellular matrix protein.
  - 15. Use according to claim 14 in which the sperm sample that has been conserved in a non-capacitated state is obtained by thawing extracellular matrix protein-containing frozen sperm.
- 16. Use according to claim 14 in which the sperm sample that has been conserved in a non-capacitated state is an extracellular matrix protein-containing sperm sample that has been stored in liquid form.
- 17. Use according to claim 14 in which the sperm sample that has been conserved in a non-capacitated state is a sample that naturally contains an extracellular matrix protein.

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- 18. Use according to claim 14 in which the sperm sample that has been conserved in a non-capacitated state is fresh sperm in which capacitation has been suppressed until ready for use.
- 5 19. Use according to any one of claims 14 to 18 in which the extracellular matrix protein is selected from fibronectin, vitronectin and laminin.
  - 20. Use according to any one of claims 14 to 19 in which the capacitating agent is angiotensin II or angiotensin II amide or an peptide containing the tripeptide RGD.
  - 21. A reproduction cell medium comprising one or more extracellular matrix proteins as an agent to conserve sperm in a non-capacitated state.

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- 22. A reproduction cell medium according to claim 21 in which the extracellular matrix protein is selected from fibronectin, vitronectin and laminin.
  - 23. A reproduction cell medium comprising angiotensin II or a related peptide as an agent for capacitation of sperm samples that have been conserved in a non-capacitated state.
  - 24. A reproduction cell medium according to claim 23 in which the capacitating agent is angiotensin II or angiotensin II amide or a peptide containing the tripeptide RGD.
- 25. A sperm inhibition composition comprising one or more extracellular matrix proteins.
  - 26. A sperm enhancement composition comprising angiotensin II or a related peptide.
  - 27. A composition according to claim 25 or 26 in which the active substance is dispersed in a pessary base.